

APPENDIX.

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The following observations on *Cephalodiscus* were made in consequence of a letter received from Professor M'Intosh, calling my attention to certain remarkable features in the anatomy of the genus. I am very greatly indebted to Professor M'Intosh for his courtesy in giving me specimens of *Cephalodiscus*, and most of all for his kindly expressed desire that I should publish my conclusions as an appendix to his own monograph. Time has not permitted of my seeing the proofs of this monograph, and I must therefore claim indulgence for any descriptions which would otherwise appear unnecessary repetitions of the results of Professor M'Intosh himself.

In examining sections of *Cephalodiscus*, I have been struck with the existence of various organs which appear to me to point to the conclusion that this remarkable genus is a near ally of *Balanoglossus*. This very unexpected result will be understood by comparing the following woodcuts (with the remarks which accompany them) with Bateson's papers on the anatomy and development of *Balanoglossus*.¹

Fig. 1 represents a longitudinal, right and left, section of a young bud of *Cephalodiscus*. The resemblance between this section and Bateson's diagrams of the larvæ of *Balanoglossus*² is, in all essential details, exact. The body of the young *Cephalodiscus* is divided, by means of two transverse grooves, into three well-marked regions. Of these the anterior (*p.*) may be compared to the proboscis of *Balanoglossus*; the middle division (*c.*) to the collar of the same animal, and the posterior division (*tr.*) to the trunk or body. It will further be noted that the proboscis is pro-

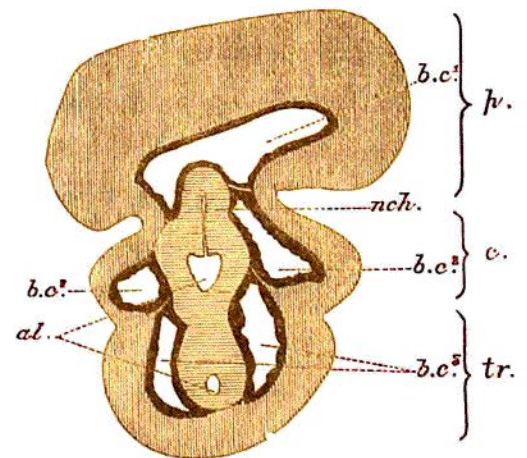


Fig. 1.

FIG. 1.—*p.*, proboscis; *c.*, collar; *tr.*, trunk; *al.*, alimentary canal; *nch.*, notochord; *b.c.*¹, body-cavity of proboscis; *b.c.*², body-cavity of collar; *b.c.*³, body-cavity of trunk.

¹ *Quart. Journ. Micr. Sci.*, vols. xxiv., xxv., xxvi.

² *Quart. Journ. Micr. Sci.*, vol. xxvi., pl. xxxiii. fig. 7.